REF2014
Unit of Assessment 34

Dr Sarah O'Hana

Laser surface colouring of titanium for contemporary jewellery

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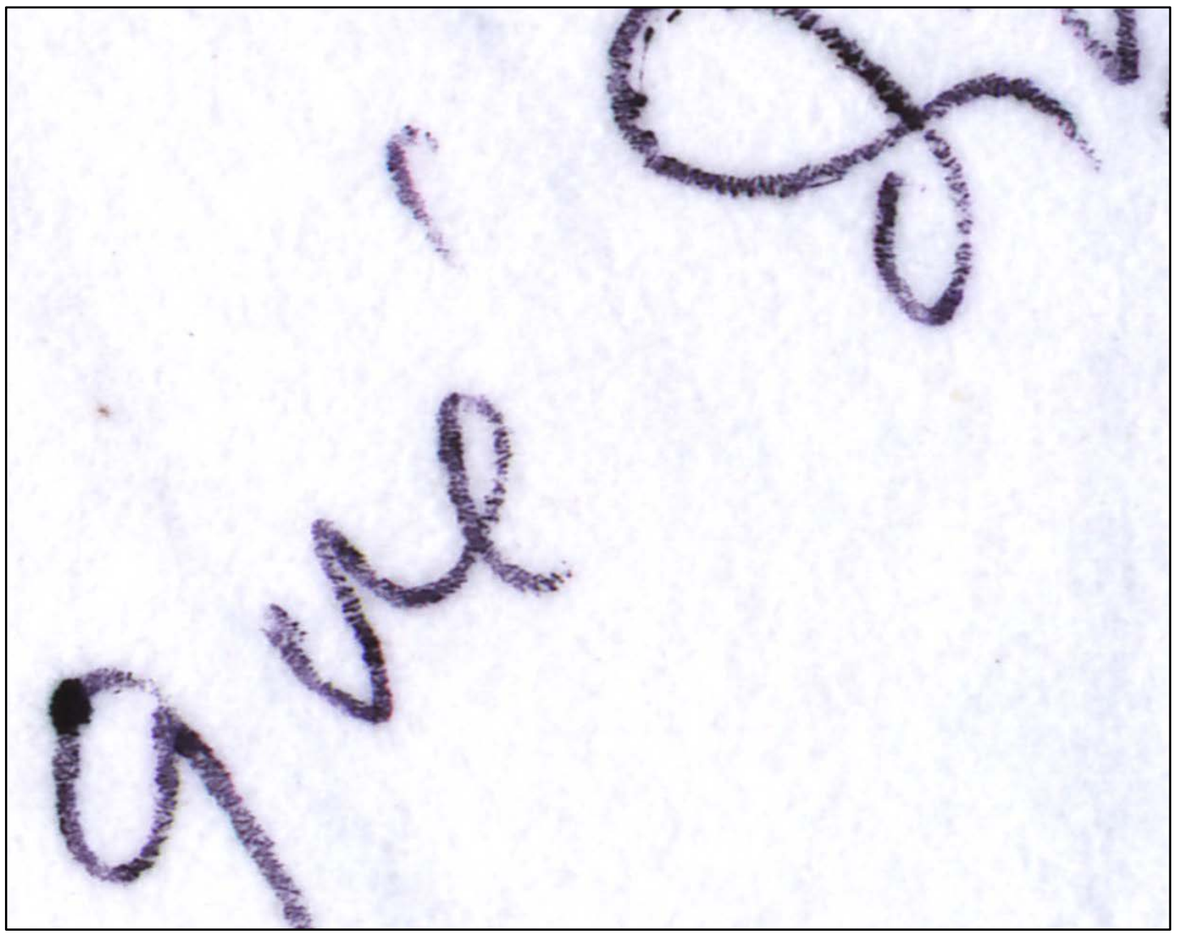
Laser surface colouring of titanium for contemporary jewellery



Drawings from the sketchbook of Sarah O'Hana for transfer to titanium by laser

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Laser surface colouring of titanium for contemporary jewellery

Extreme differences between workshop and laboratory environments

Laser Processing Research Centre, The University of Manchester

Academic: Sarah O'Hana

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Laser surface colouring of titanium for contemporary jewellery

Sarah O'Hana in the Laser Processing Research Centre, The University of Manchester

Sarah O'Hana working with Dr Philip Crouse, The University of Manchester

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Laser surface colouring of titanium for contemporary jewellery

Ocular Series 1-6. Acrylic, laser marked titanium, silver, recovered lens

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Laser surface colouring of titanium for contemporary jewellery

Ocular Series 1-6. Acrylic, laser marked titanium, recovered lens

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Laser surface colouring of titanium for contemporary jewellery

Ocular Series 1-6. Close up to show laser path in acrylic and marking on titanium

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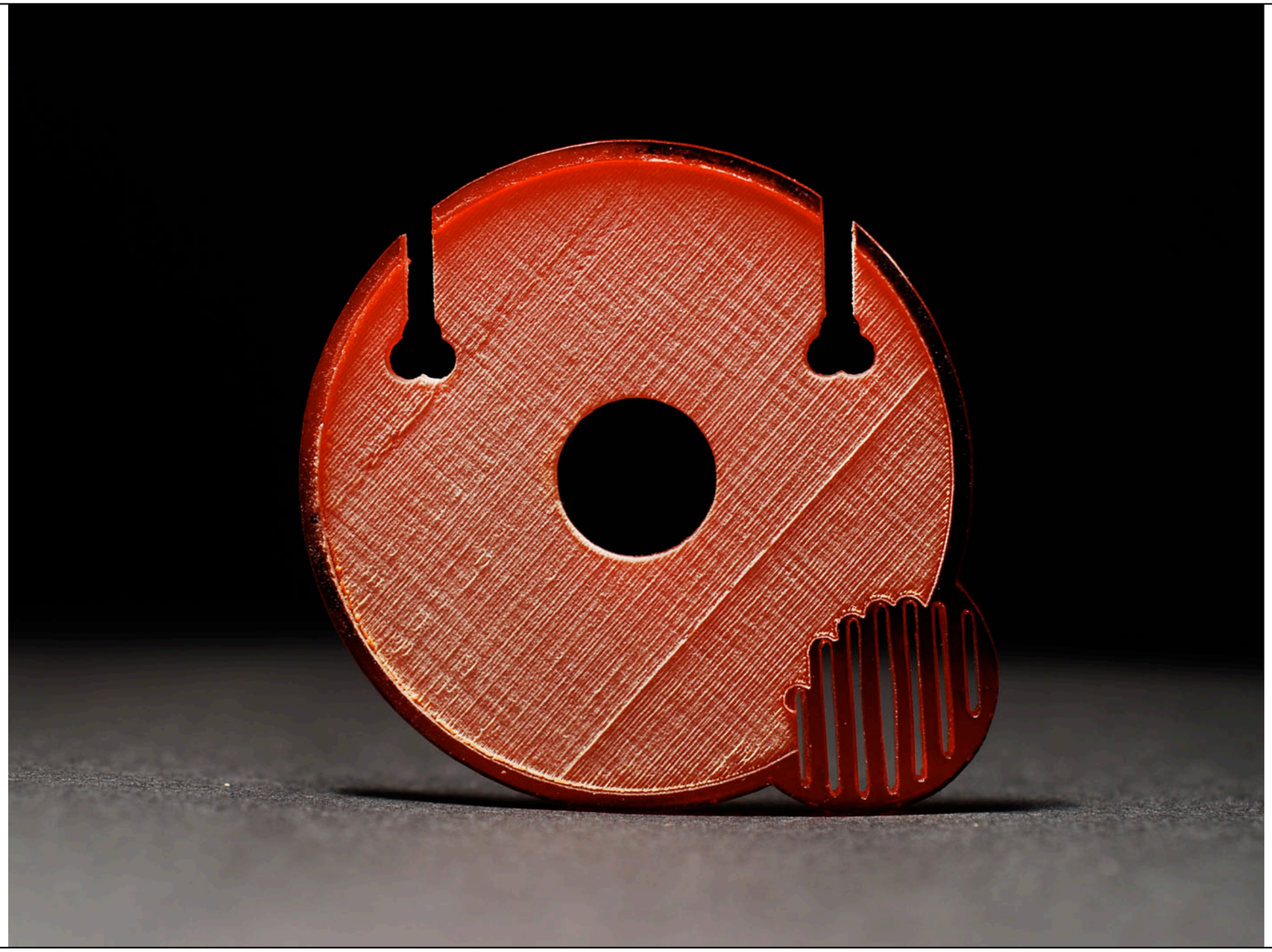

Ocular Series 1-6. Acrylic casing to hold titanium plates

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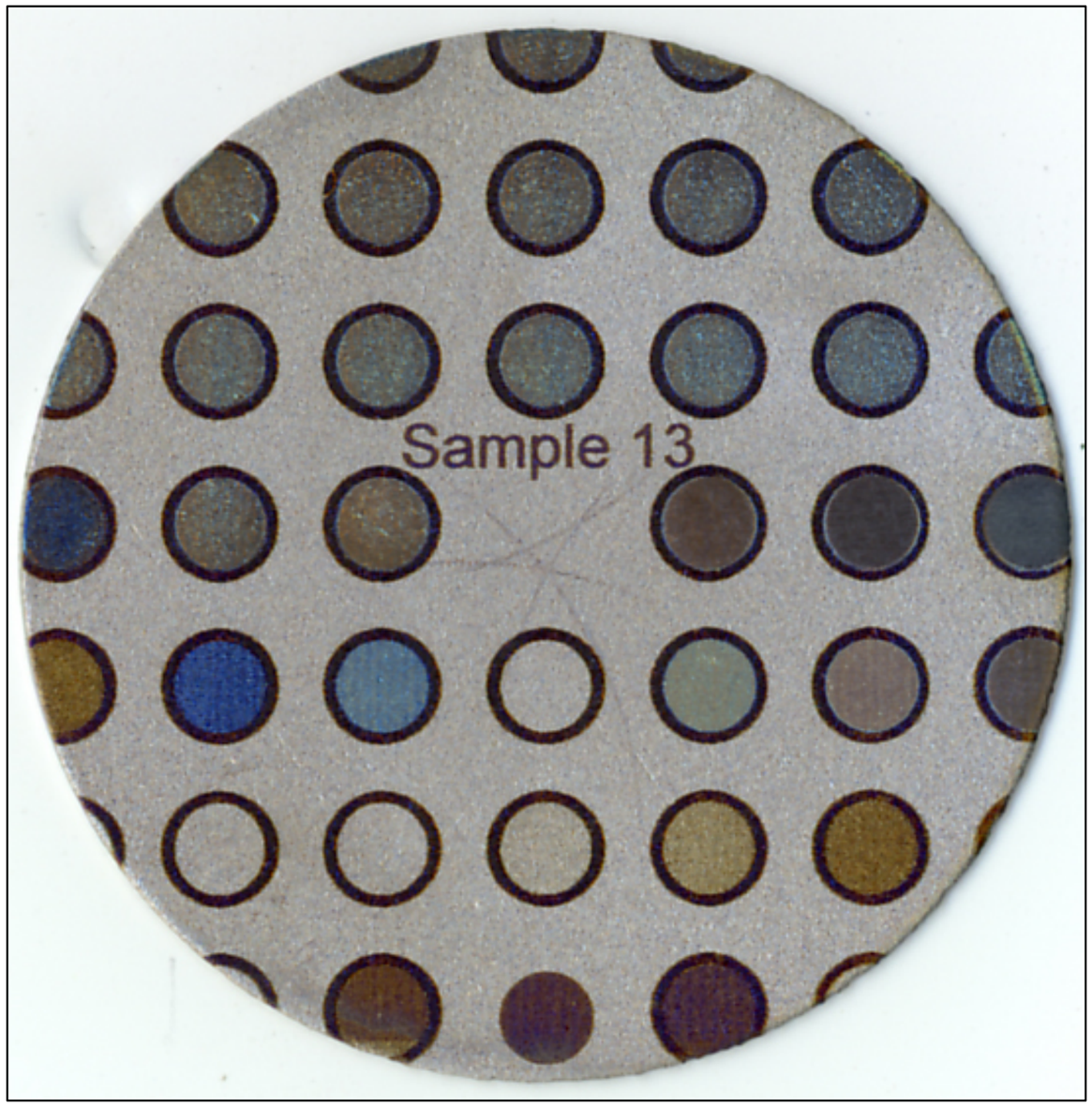

Sample 13 shows different colours achieved with controlled laser parameters

Sample 13 showing selected colours cut for observation and analysis

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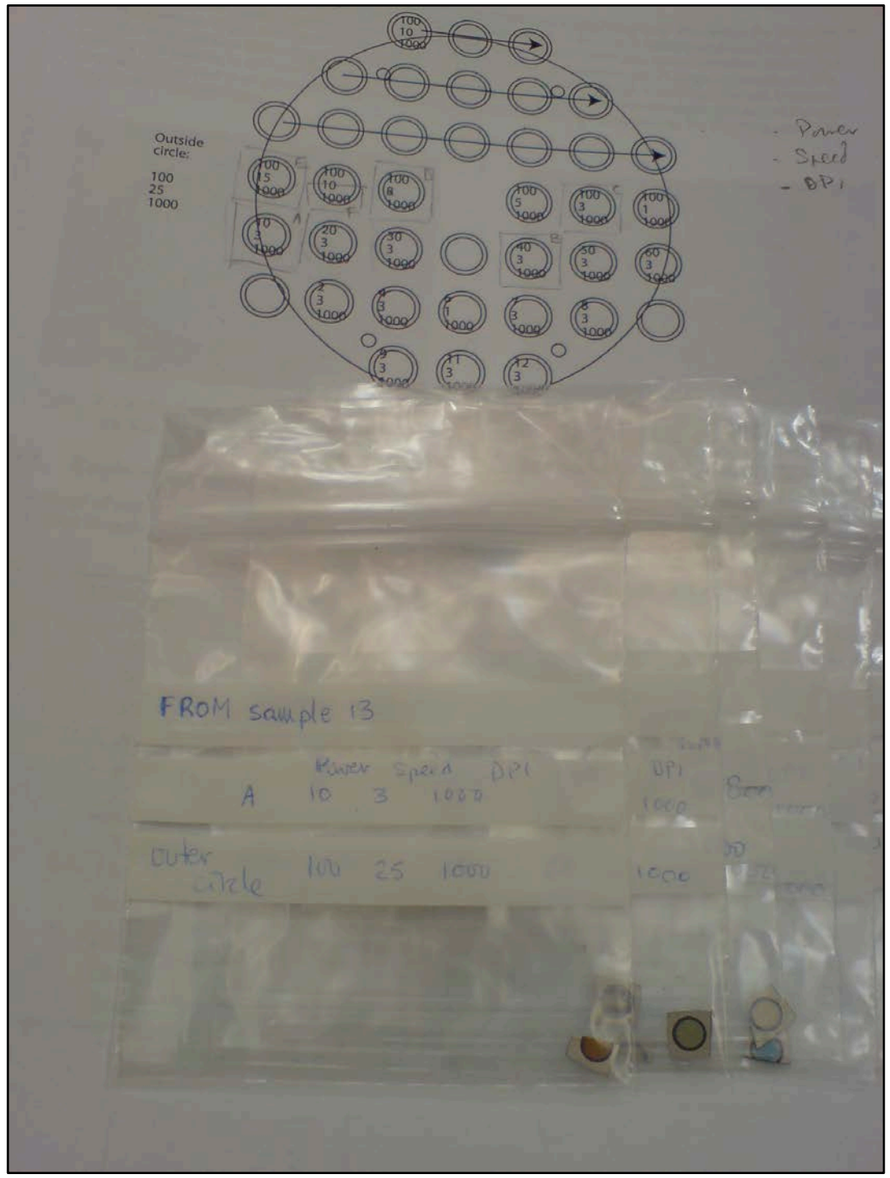
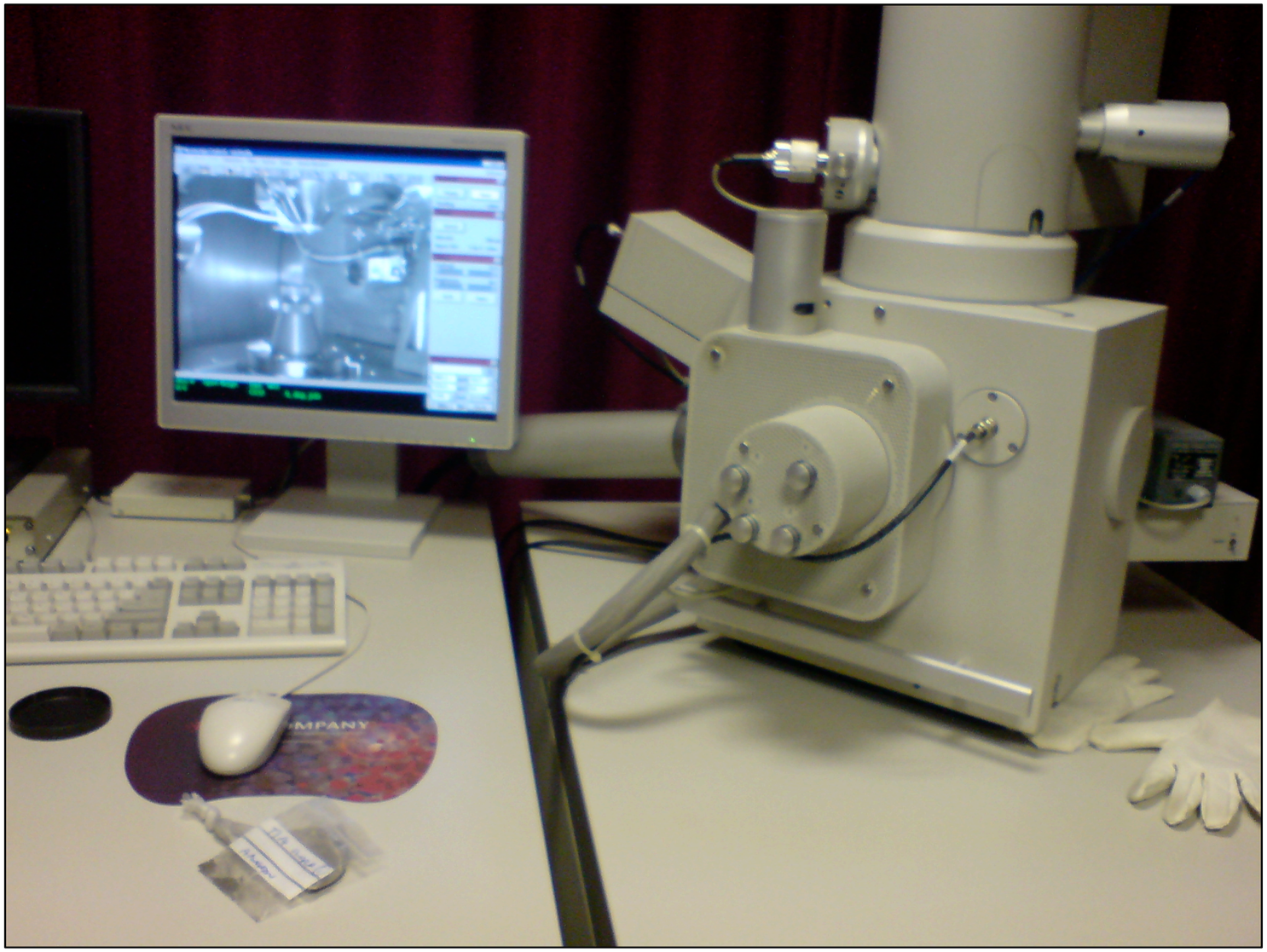


Sample 13 prepared colour tests



Scanning Electron Microscope used to capture images from Sample 13

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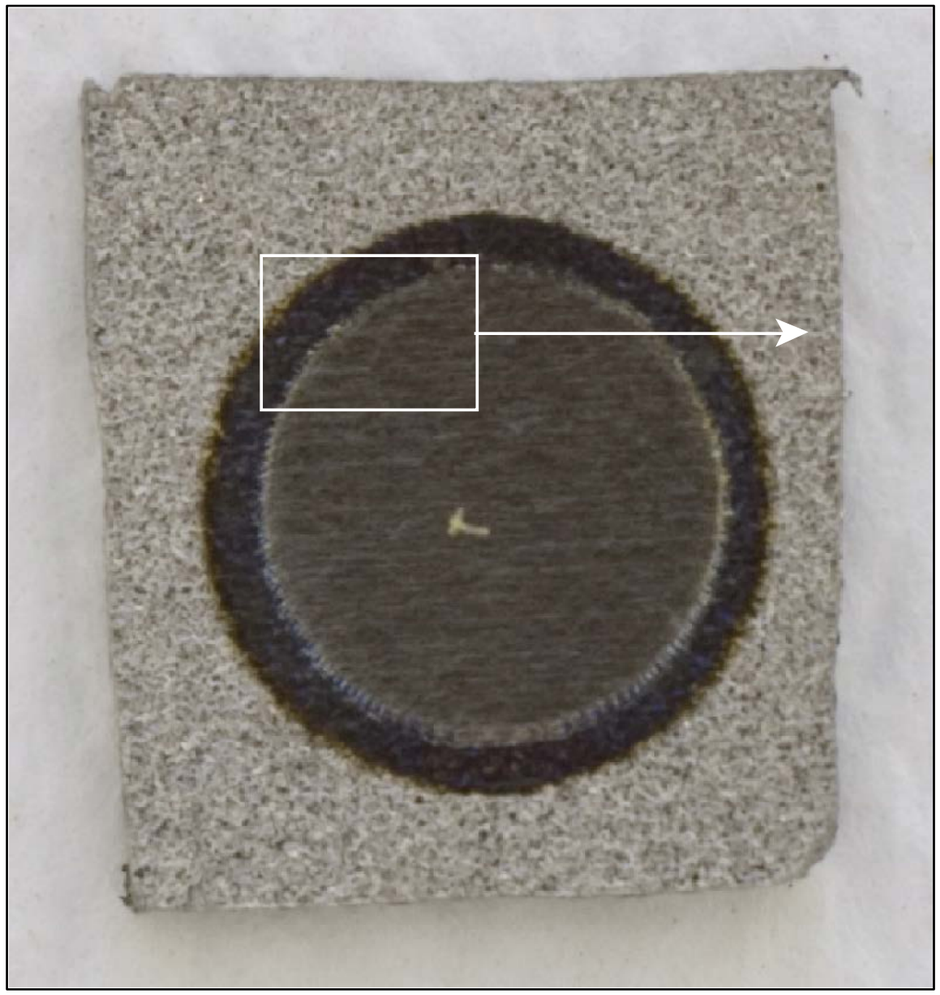

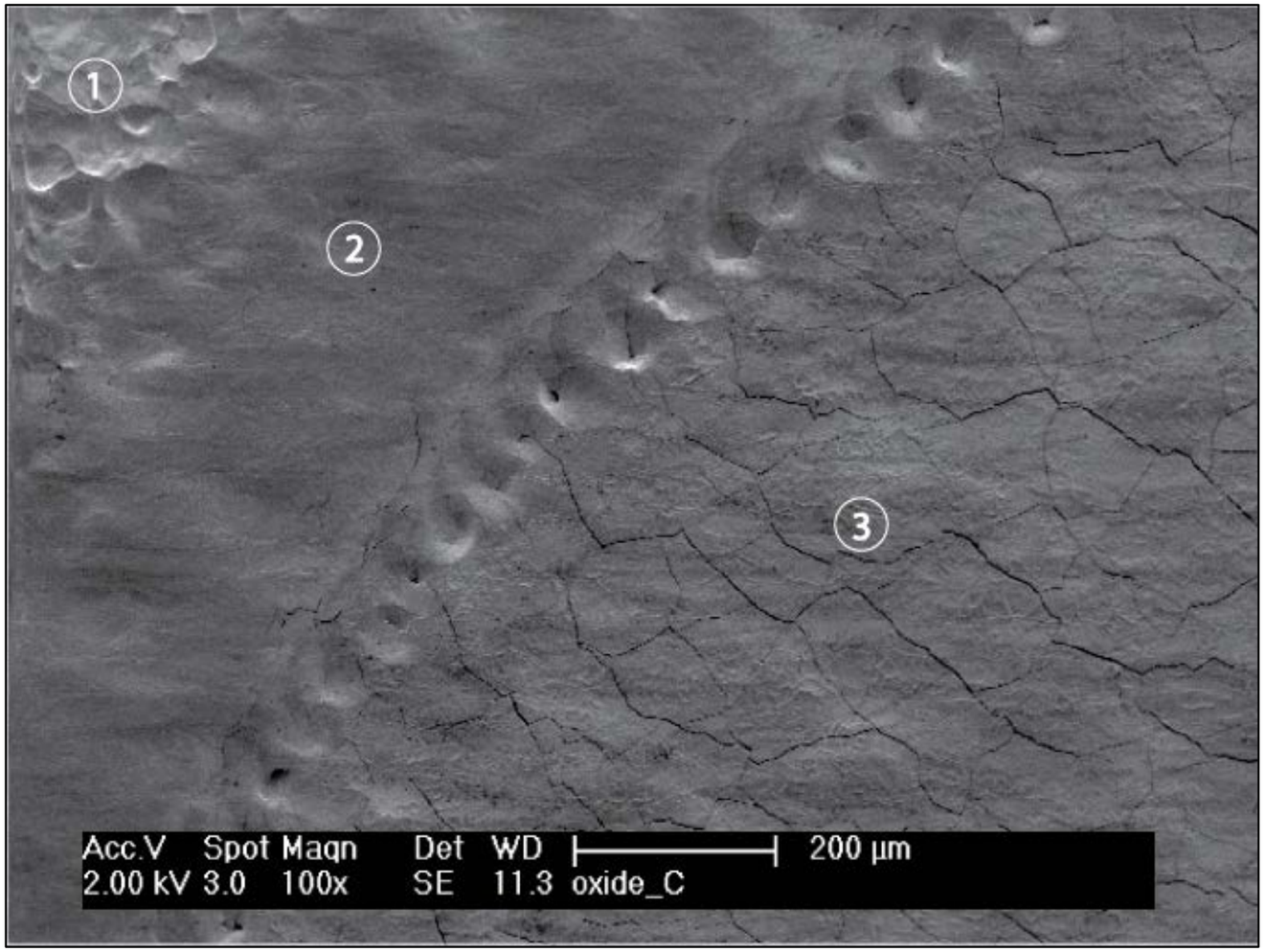

Colour test from Sample 13 and corresponding view using SEM photography

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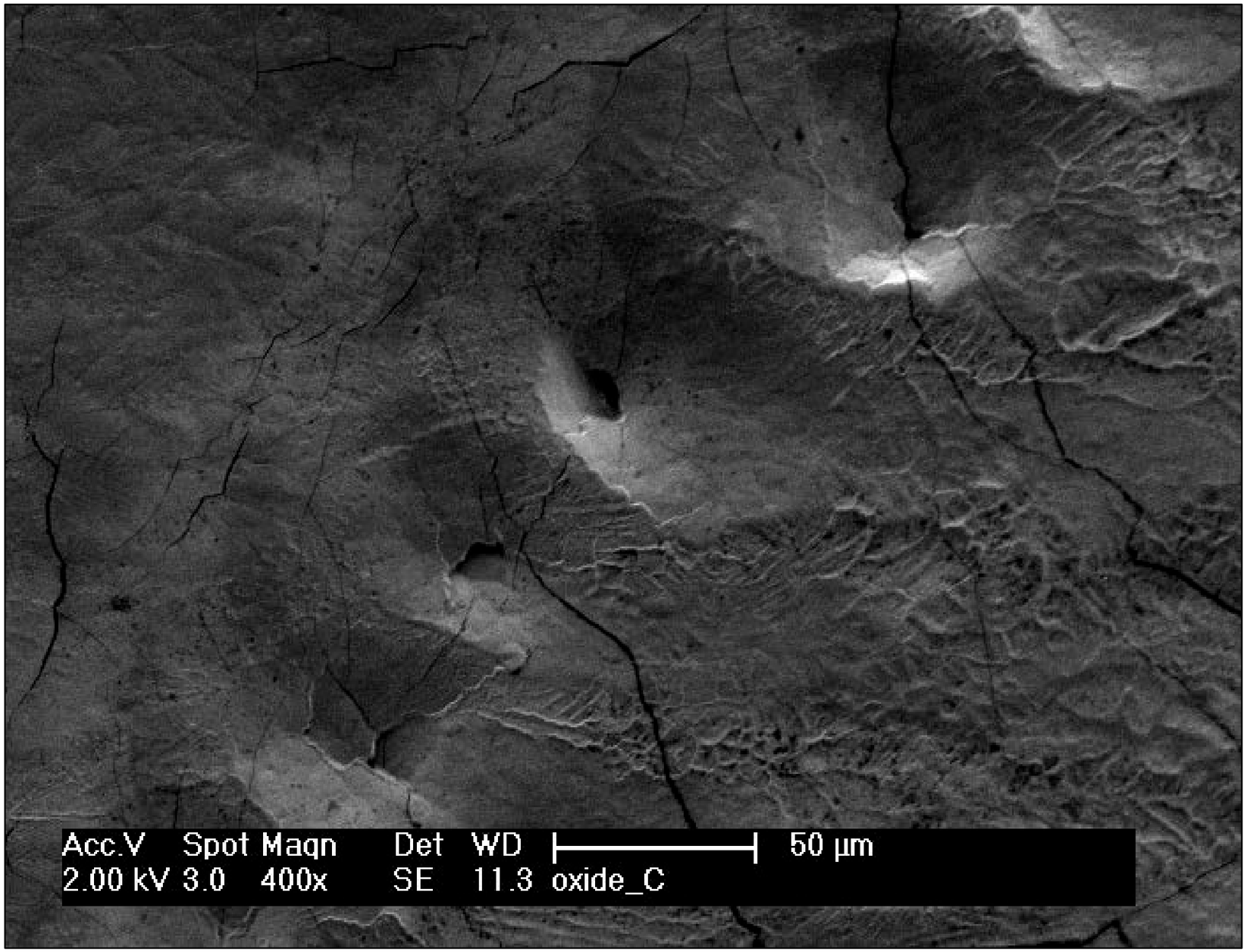

Close up showing craters in titanium oxide due to power surge from initial laser irradiation

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Opening of exhibition *From Art to Engineering,* George Begg building, The University of Manchester

Opening of exhibition *From Art to Engineering,* George Begg building, The University of Manchester:

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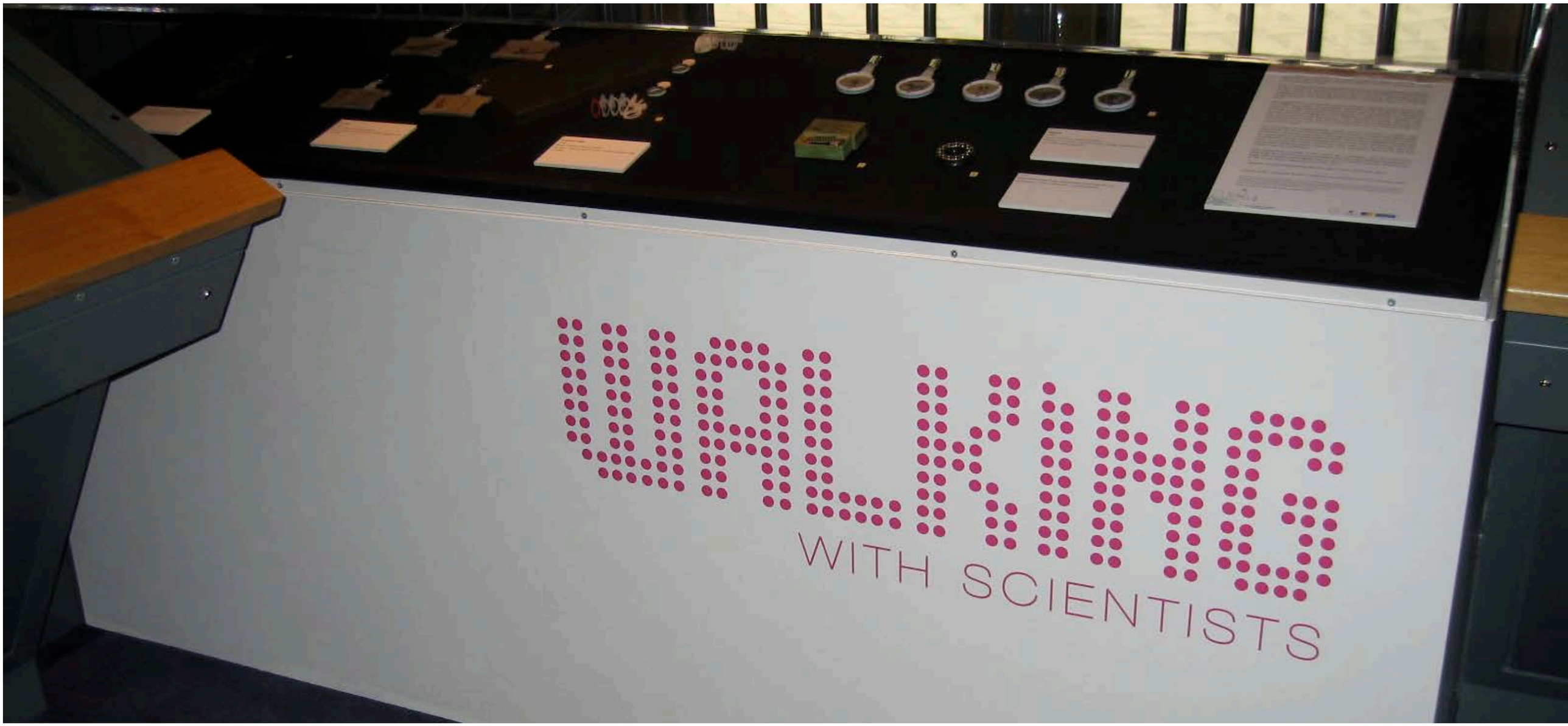

Opening of the exhibition *Walking with Scientists* at the Museum of Manchester during Ars Ornata Europeana conference where first parts of Ocular Series 1- were shown

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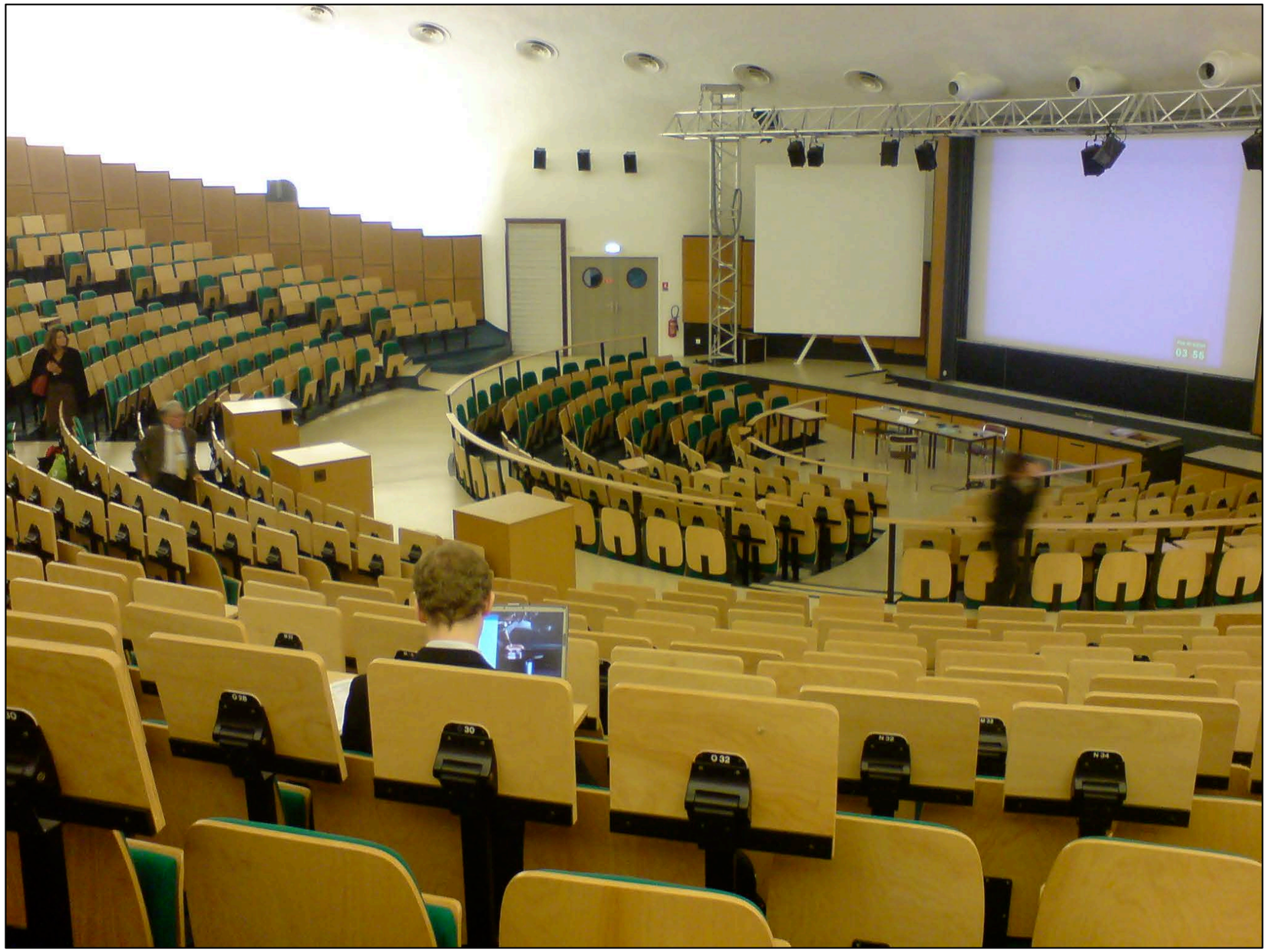

Conference venue for Surface Modification Technologies (SMT 21), ENSAM, Paris

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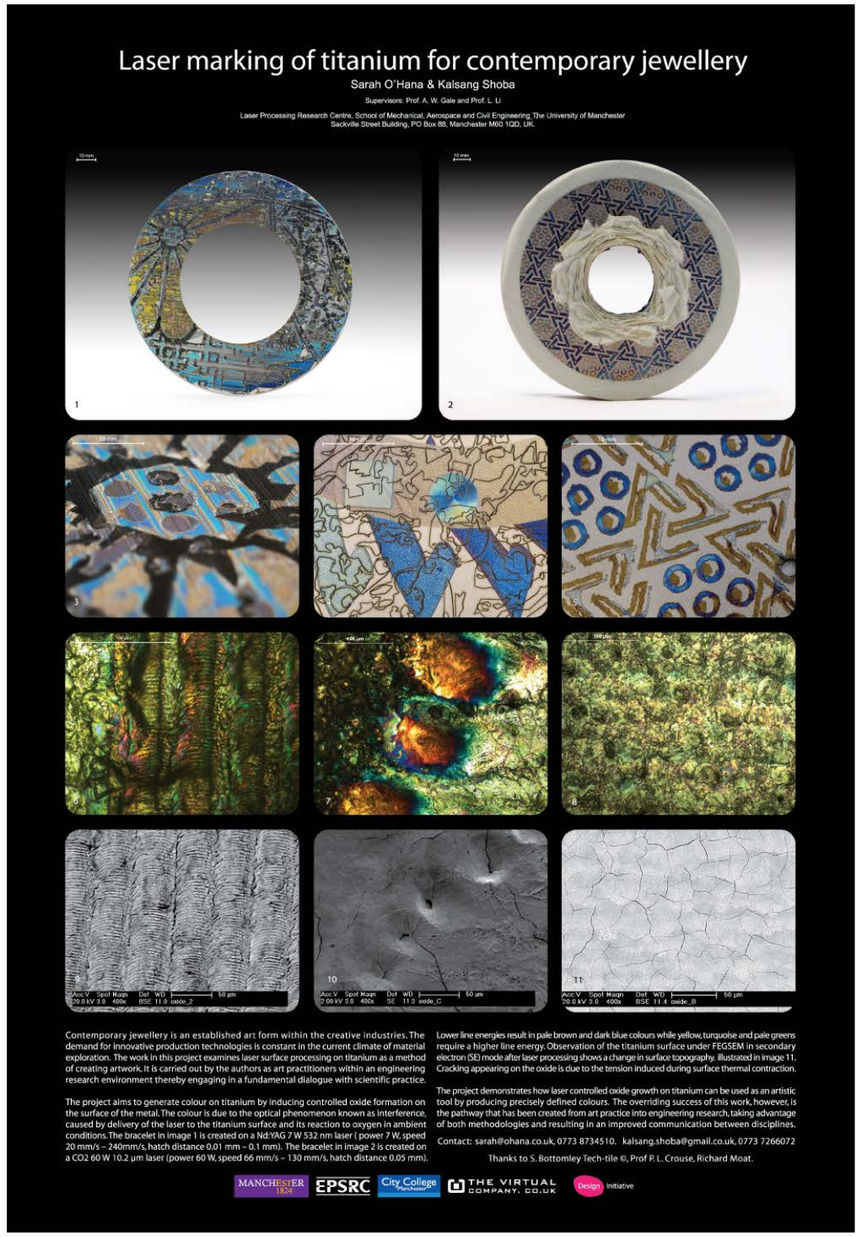

Poster showing work from Laser surface colouring of titanium for contemporary jewellery

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Laser surface colouring of titanium for contemporary jewellery

Poster showing work from Laser surface colouring of titanium for contemporary jewellery , shown at the the Mechanical, Aerospace and Civil Engineering PhD conference, The University of Manchester

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Laser surface colouring of titanium for contemporary jewellery

Sarah O'Hana with other speakers from the jewellery and scientific cultures at the Ars Ornata conference, Manchester

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